$$\mathbb{R}^{10} \bigcap_{\mathbb{R}^{10}} \bigcap_{\mathbb$$

FIGURE 1



$$R(O)CO \longrightarrow P OR^{1}$$

$$D \longrightarrow P OR^{1}$$

$$D \longrightarrow P OR^{1}$$

$$RCO_{2}H \longrightarrow P OR^{1}$$

$$D \longrightarrow P OR^{1}$$

$$D \longrightarrow P \cap R^{1}$$

$$D \longrightarrow P$$

FIGURE 2

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$$F_{2} \longrightarrow Pd(PPh_{3})_{4} \longrightarrow Pd$$

FIGURE 3

FIGURE 5

(a) PMBOH, DIBAL,  $CH_2CI_2$ , 51%; (b) TBDMSCI, DMAP, TEA,  $CH_2CI_2$ , 78%; (c) NaH, TBAI, BrCH $_2CH_2$ OTHP, DMF, 56%; (d) TBAF, THF, 95%; (e) Oleic acid (Palmitic acid), DCC, DMAP,  $CH_2CI_2$ , 82%; (f) DDQ,  $CH_2CI_2$ , 66%; (g) (OMe) $_2$ PCI, t-BuOK, 75%; (h)TMSBr, MeOH/ $H_2O$ , 95%.

(a) THPOCH<sub>2</sub>CH<sub>2</sub>OH', DIBAL, CH<sub>2</sub>Cl<sub>2</sub>, 50%; (b) TBDMSCl, imidazole, DMF, 91%; (c) HF-Py/Py, THF, 58%; (d) (OMe)<sub>2</sub>PCl, Methylimidazole, 87%; (e) TBAF, AcOH, THF, 76%; (f) Oleic acid (Palmitic acid), DCC, DMAP, CH<sub>2</sub>Cl<sub>2</sub>, 85%; (g) TMSBr, MeOH/H<sub>2</sub>O, 95%.

# FIGURE 8

FIGURE 10

FIGURE 11

FIGURE 12

Br Br O 
$$\frac{1}{2 \text{ steps}}$$
 F P O  $\frac{Pd(PPh_3)_4}{OH}$  HO  $\frac{K_2CO_3}{MeOH}$ 

19 20 21

Bu  $\frac{1}{19}$   $\frac{1}{1$ 

M = Co(OAc): (R,R)-23

FIGURE 13

26aa (sn-2R, oleate) 26ab (sn-2R, palmitate)

26ba (sn-2R, oleate) 26bb (sn-2R, palmitate)

HO OH 
$$\frac{\text{Cu}_2\text{SO}_4}{\text{OH}}$$
  $\frac{\text{Cu}_2\text{SO}_4}{\text{2. PDC}}$   $\frac{\text{O}}{\text{PPO}(\text{OEt})_2}$   $\frac{\text{Cin}(\text{TMS})_2}{\text{HPO}(\text{OEt})_2}$   $\frac{\text{O}}{\text{OH}}$   $\frac{\text{O}}{\text{PPO}}$ 

$$C_{17}H_{31}$$
 $C_{17}H_{31}$ 
 $C_{15}H_{31}$ 
 $C_{15}H_{31}$ 

FIGURE 16

Eto P OEt 
$$-78-0$$
 °C  $Pd-C$   $Pd-C$ 

Figure 17

Figure 18

Figure 19

Figure 21

Figure 22